

A Fishing Float for positioning, Detecting Fish Catch and Lighting

Field of the Invention

- 5 This invention related to an improvement of fish float, in particular, the float base is design with a flat bottom which keeps the float never returning to shore. The bright light it emits provides the fishing man an easy identification of where the fish hook is and accurately knowing whether a fish is caught or not without aid of the night vision light.

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Background of the Invention

Fishing is one of the best leisure activities to cultivate the patience. The fishing man has to wait with long quiet patience the fish to bite the bait on the fish hook; it is dull and tasteless long waiting. At the moment the fish is being hooked, the exciting pleasure is beyond description, this is critical reason most people like fishing.

The float and night vision light are necessities for the night fishing even in pond fishing, sea fishing and river fishing which provide the fishing man the indication of fish catch and lighting. There are diverse floats and night vision lights available for use in fishing independently or in combination for the fishing man to see clearly the response of float. However, most floats are designed with round bottom, easy for the wave to drive them back to sea shore. For poor sight fishing man, if the float is too far away and the night vision light runs out, there is no advance warning signal to indicate whether the fish is being caught or not, he losses the chance in vain. Furthermore, the waste night vision light is hard to dispose of, it becomes an environmental problem. Since the prior art of induced float is unable to provides positioning and identification of fish catch, it requires the aid of the night vision light. Because these two are used independently, not in combination, no way to satisfy the desire the fishing man asks for, there is room for improvement.

Summary of Invention

The main object of this invention is to provide a float for easy positioning and bright lighting to reveal an early signal of fish catch without the aid of the night vision light. The main improvement is to add to the float the inductive device and the lighting device along with base and top lid. The inductive device comprises the inductive circuit board, the inductive coil, the inductive shaft and the spring; the lighting device contains the light circuit board, a plurality of LEDs and pedestal. The base bottom is a flat design. This combination is suitable for pond fishing and sea fishing. Because the flat bottom always keep the float at a fixed place, never permitting the wave to drive back to shore. While the fish is biting the bait, the inductive shaft is being pulled down and leaves the induced range of the inductive coil. At this instant, the central LED emit the red light and the out-border LEDs continue the blue light. In other words, if not fish biting, there is only blue light visible, no red light at all. The flat bottom design and the change of light colors (a combination of blue light with the red light) serve a warning signal showing the moment a fish is biting the bait on the fish hook. It also works as the lighting source.

The invention is explained in great detail with the aid of embodiments as illustrated in the attached drawings.

Brief Description of Drawing

Fig. 1 shows the disassembly of the float of this invention.

Fig. 2 shows the enlarged disassembly of the float of this invention.

Fig. 3 shows the appearance of the complete assembly of the float of the invention.

Detail Description of the Invention

Please refer to Figs. 1 and 2; the float (1) consists of a base (10), a top lid (20),

a lock bolt (30), a waterproofing washer (40), a battery compartment (50), a lighting device (60) and an inductive device (70). In which the base (10) is round house separated into empty compartment (101). The central hollow post (102) forms a connecting rod (103) at the lower end. Of the base (10) to link the inductive coil (702). The lock bolt (30) has the inner thread to be locked on out thread of the connecting rod (103). Because the base bottom is a flat design, it is always keeping floating at a fixed place on the seas away from the sea shore.

The top lid (20) is a round casing made of the transparent material so the red lights or the blue lights emitted from the LEDs (602) of the lighting device (60) are visible clearly.

The lock bolt (30) has the inner thread to be locked on the connecting rod (103).

The waterproofing washer (40) sits between the top lid (20) and the base (10) to keep the water from entering into the base.

The battery compartment (50) is housed in the space formed by the top lid (20) and the base (10). The battery is the power source for the lighting device (60) and the inductive device (70).

The lighting device (60) is mounted on the top of the battery compartment (50). The lighting device comprises the lighting circuit board (601), a plurality of LEDs (602) and the pedestal (603). The lighting circuit board (601) links a plurality of LEDs (602) in two colors, red and blue. The central protruded LED is red which is activated while the fish is biting. The blue LEDs surround the red LED serving the lighting. The pedestal (603) has a plurality of holes (604) permitting the LEDs (602) extending out of the holes (604) so the red or blue lights are visible outside of the top lid (20).

The inductive device (70) is placed under the battery compartment (50), consisting of inductive circuit board (701), the inductive coil (702), the inductive shaft (703) and spring (704).

5 The circuit board (701) is housed in the empty compartment (101) in the base (10). The inductive coil (702) encircles the central post (102). The inductive shaft (703), the spring (704) and the connecting rod (103) will be held together by the lock bolt (30) but one end of the inductive (704) will extend out of the lock bolt (30) but prevent them from falling off the lock bolt (30). The size of
10 the spring (704) shall be inline with the catch fish weight the fishing man intends to catch. The connecting rod (703) links to the hook and bait.

As shown in Fig. 3, this float (1) of this invention renders easy positioning, identifying the fish catch and lighting.

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In practice, the float (1) of this invention is always floating at a fixed place on the seas away from the sea shore. While the fish is biting the bail on the hook, the inductive shaft (703) is being pulled down from the inductive device (70), and leaves the induced range of the inductive coil (702). The central LED (602)
20 on the lighting device (60) will emits the red light and the LEDs (602) surrounding the lighting device (60) will continue emitting blue light. If no fish biting, no red except the blue light from the LEDs (602) of the lighting device (60). Since the base (10) is designed with the flat bottom, it is always buoyed up at a fixed place away from the sea shore. The different light combination
25 (blue lights plus red light) coming out of the LEDs (602) of the lighting device (60) give the fishing man a advanced warning signal indicating the fish is biting or the necessary lighting in the dark.

Viewing from the above statement, it is learned that the float provided in this
30 invention for easy positioning, identifying the fish catch and lighting is a technical break through, an vital improvement from the prior art. It is simple,

practicable, and innovative, justified for the grant of new patent.